

Alexander L. Harris

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Education

B.A. Swarthmore College, Chemistry, 1978
Ph.D. University of California at Berkeley, Physical Chemistry, 1985

Professional Employment

Chair, Chemistry Department, Brookhaven National Laboratory, 3/2003-present
Facility leader, Ultrafast Lasers, Center for Functional Nanomaterials, BNL 11/2005-present
Director, Guided Wave and Electro-optic Devices Research Dept., Agere Systems, 9/2000-2/2003
Head, Materials Chemistry Research Department, Bell Labs, Lucent Technologies, 1996-2000
Technical Manager, Analytical Chem. & Control Tech., Bell Labs, Lucent Technologies, 1995-96
Member of Technical Staff, Physical Sciences Res. Div., AT&T Bell Laboratories, 1985-1995

Honors and Awards, Fellowships

Fellow, American Physical Society, 2004
PEL Associates Award in applied polymer chemistry, 2001
Distinguished Member of Technical Staff, AT&T Bell Laboratories, 1994
Graduate: University of California at Berkeley: National Science Foundation Predoctoral Fellowship, 1979-1983; Joel Hildebrand Memorial Teaching Award, 1981
Undergraduate: Swarthmore College: American Institute of Chemists Award for outstanding undergraduate chemist, 1978; Stanley Adamson Prize for junior science major, 1977; Phi Beta Kappa, Sigma Xi

Professional Activities

Member, Chemical Sciences Roundtable, National Academies of Science, 2003-present
Fellowship selection committee, German Academic Exchange Service (Deutscher Akademischer Austausch Dienst; DAAD Fellowship), 2004-present
Executive Committee, American Chemical Society Div of Physical Chemistry, 1999-2002.
Site Review Committee and Preproposal Evaluation Committees, National Science Foundation, Science and Technology Centers, Materials Research Laboratories, 1992, 1998.
Proctor & Gamble Award Committee, American Chemical Society, 1997.
Vice-chair, Gordon Research Conference on Vibrational Spectroscopy, 1996.
Program committee Quantum Electronics and Laser Science (QELS) meeting, 1991.
Bell Laboratories Ph.D. recruiter and recruiting committee (1993-2000); Summer Research Program Committee (1990-1992).
Member, American Chemical Society, American Physical Society, Optical Society of America

Research Interests

Surface and interfacial dynamics; surface molecular dynamics; vibrational energy transfer; interface nonlinear optical spectroscopy; ultrafast interface spectroscopy; surface vibrational spectroscopy; nanoparticle spectroscopy; photopolymer kinetics; organic optical materials; holographic data storage; planar optical waveguide devices; high speed optical communication devices

Publications, Patents and Presentations

>40 technical publications in materials for optical communications and optical data storage applications; ultrafast studies of chemical dynamics; and nonlinear optical spectroscopy.

4 Patents issued in materials and processes for optical communications and optical data storage.

>50 invited technical presentations at universities, technical societies and national laboratories.